

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re: U.S. Patent Application of Wayne L. RANDELL et al.  
App. No.: 09/845,396  
Filed: April 30, 2001  
Examiner: Jennifer L. LIVERSEDGE  
Art Unit: 3628  
For: METHOD AND SYSTEM FOR PROCESSING INVOICES

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**AFFIDAVIT UNDER 37 CFR 1.131**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

We, Wayne L. Randell of the City of Oakville in the Province of Ontario, Canada; Leonard A. Podgurny of the City of Mississauga in the Province of Ontario, Canada; and Edward A. Widlake of the City of Grimsby in the Province of Ontario, Canada, being duly sworn, depose and state:

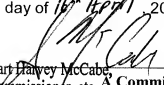
1. We are the co-inventors of claims 48 and 50 through 116 of the above-identified U.S. patent application and co-inventors of the subject matter described and claimed therein.
2. At the time of the invention, we were employed by Canadian National Railway Company (hereinafter referred to as "CN") at their Toronto facility in Ontario, Canada.
3. We conceived, in Canada, the invention as described and claimed in the above-identified patent application prior to April 3, 2001, the filing date of the cited U.S. Patent Publication No. US 2003/0167229.


4. Attached as Exhibits "A", "B" and "C" to this Affidavit are copies of Use Case documents prepared internally at CN. The original dates on these documents (as seen in the footer of each document) are respectively July 24, 2000, July 26, 2000 and August 7, 2000. We confirm having co-authored these documents back in 2000, in the course of conceiving the invention described in the above-identified patent application. Together, these documents broadly describe the present invention as claimed in the above-identified patent application, the portion(s) of each document that is (are) most relevant to the invention having been highlighted for easy reference.
5. We are advised by Ms. Trina Sarin of the law firm of Smart & Biggar (and related agency Fetherstonhaugh) and believe that diligence was exercised from well before April 3, 2001, leading up to the filing date of the above-identified patent application, namely April 30, 2001, in initiating and preparing the above-identified patent application.
6. Attached hereto and marked as Exhibit "D" to this Affidavit is a copy of a letter dated December 22, 2000 from Ms. Brigide Mattar of Smart & Biggar/Fetherstonhaugh to Ms. Brigitte Catellier, who was at that time Senior Corporate Counsel and Associate Secretary for CN. We are advised by Ms. Sarin and believe that the letter is taken from the files of Smart & Biggar/Fetherstonhaugh. We have reviewed the letter and confirm that the summary of the present invention provided therein is a broad and accurate reflection of our conception of the invention. Note that parts of this letter that have no relevance to this Affidavit have been blocked off.
7. Attached hereto and marked as Exhibit "E" to this Affidavit is a copy of a document entitled "Memorandum to File" dated March 5, 2001, summarizing discussions held during a meeting on March 2, 2001 between Ms. Catellier, Ms. Mattar, Ms. Jennifer Marvin of CN and Mr. Stephan Georgiev of Smart & Biggar/Fetherstonhaugh. We are advised by Ms. Sarin and believe that the

memorandum was authored by Ms. Mattar and is taken from the files of Smart & Biggar/Fetherstonhaugh. We have reviewed the memorandum and confirm that the summary of the present invention provided therein is a broad and accurate reflection of our conception of the invention. Note that parts of this memorandum that have no relevance to this Affidavit have been blocked off.


8. Attached hereto and marked as Exhibit "F" is a copy of a letter dated April 23, 2001 from Ms. Mattar to Ms. Marvin, enclosing a final draft of the above-referenced patent application, as referenced in the body of the letter. We are advised by Ms. Sarin and believe that the letter was received on or after the date indicated and is taken from the files of Smart & Biggar/Fetherstonhaugh.
9. We are advised by Ms. Sarin and believe that the above-referenced patent application was filed on our behalf on April 30, 2001.
10. We swear this Affidavit with the knowledge that willful false statements and the like are punishable by fine and imprisonment, or both under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issued thereon.

SWORN BEFORE ME AT the  
City of Mississauga, Province of  
Ontario, Canada, on this  
day of 16<sup>th</sup> April, 2007.

  
Stuart Harvey McCabe,  
a Commissioner, etc., a Commissioner, etc.  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents,  
Expires September 19, 2009

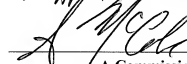
  
WAYNE L. RANDELL

SWORN BEFORE ME AT the )  
City of Mississauga, Province of )  
Ontario, Canada, on this 16<sup>th</sup> )  
day of April, 2007. )

  
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Stuart Harvey McCabe, Commissioner, etc.  
a Commissioner, etc.,  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009

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a Commissioner, etc.,  
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and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009

  
\_\_\_\_\_  
LEONARD A. PODGURNY

  
\_\_\_\_\_  
EDWARD A. WIDLAKE

**EXHIBIT A**

A handwritten signature in black ink, appearing to read 'S. McCabe', is positioned above the printed name.

Stuart Harvey McCabe,  
a Commissioner, etc.,  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009

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# **eBill - Freight Payments**

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## **UC115 - Manage eBill - Payments Customer Profile Use Case**

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Document version 1.0

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# 1 INTRODUCTION

## 1.1 Purpose

This Functional Specifications document describes the **Use Case 115 Manage eBill – Payments Customer Profile** which is part of the **Business Function 100 Customer Registration and Access Control**.

This business function allows:

- Creation and the modification of eBill Customers,
- Maintenance of the eBill Customer Profile,
- Maintenance of the eBill Customer User account access,
- Access to the eBill – Payment Application.

The process for a customer employee to become an eBill Customer User is as follows:

- The employee registers via CN's Web site. This implies the employee has access to the Internet and the Web. The customer employee clicks on the 'Register' link on the Customer Solutions page of CN's web site and fills in all required information on the 'Register for eCommerce Solutions' form.
- The submitted form will be received and managed by CN's eCommerce Customer Support Group
- eCommerce Customer Support verifies that the applicant is an employee of the Customer, and after verifying with the eBill Administrator creates the new Customer Solutions account, links the account to a CN Customer number and allows the user access to the eBill – Payments application.
- eCommerce Customer Support by e-mail advises the eBill administrator of the new account creation
- The eBill Administrator defines the eBill Customer Profile based upon the information provided from the customer and the responsible Revenue Management Business Unit Manager

The process for a CN employee to become a CN Internal User is as follows:

- The CN employee registers via CN's Web site. The CN employee clicks on the 'Register' link on the Customer Solutions page of CN's web site and fills in all required information on the 'Register for eCommerce Solutions' form.
- The submitted form will be received and managed by CN's eCommerce Customer Support Group
- eCommerce Customer Support verifies with the eBill Administrator that the CN employee qualifies as an eBill - Payments customer and creates the new Customer Solutions account, linking the account to a CN Customer number and allows the user access to the eBill – Payments application.
- eCommerce Customer Support by e-mail advises the eBill administrator of the new account creation.
- The eBill administrator will define the CN employee as a CN Internal User.



## **1.2 Definitions**

### **1.2.1 Use Case Definition**

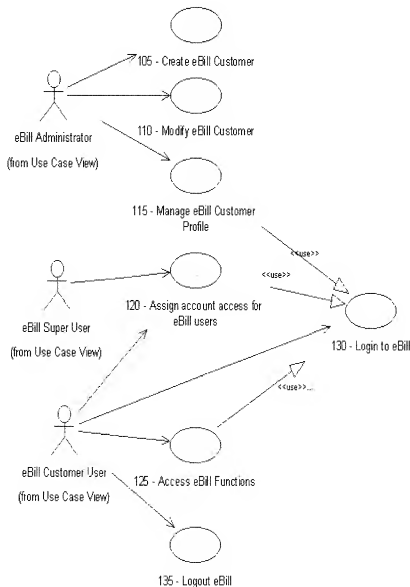
Refer to eBill – Use Case Definitions document for a definition of the terminology used by the Use Case concept.

### **1.2.2 Actors Definition**

Refer to eBill – Actors Definitions document for a definition of eBill – Freight Payments Actors.

## 2 USE CASE DIAGRAM

### 100 - CUSTOMER REGISTRATION AND ACCESS CONTROL



## 3 USE CASE 115

### MANAGE eBill CUSTOMER PROFILE

#### 3.1 Characteristics

Access Mode	On line
Service	
PERIOD	At all times
AVAILABILITY	90%
RESPONSE TIME	2 seconds or less
DATA REFRESH RATE	Immediate
USER INTERFACE	Web Interface

#### 3.2 Actors

eBill administrator  
CN Internal Users.

#### 3.3 Assumptions

- The eBill Administrator will have access to the eBill Customer Profile from the Account Receivable Rep / Account Manager Access Point main menu.
- CN Internal Users must be able to see eBill Customer Profile but must not be able to update the profile.
- The Indicator 'Status' is 'on' if a checkmark is selected.

#### 3.4 Description

The objective of this use case is to allow the eBill Administrator to manage the profile of an eBill Customer and to allow CN Internal User to see eBill Customer profile.

eBill Customer Profile view displays:

The Customer Information section,  
The Customer Profile list,  
The Submit Changes and Cancel push buttons.

The Customer Information section displays the information related to the Customer previously selected in the Account Receivable Rep / Account Manager Access Point main menu. The Customer Profile list allows the eBill Administrator to define the eBill Customer profile.

The Customer Information section is composed of:

A header line,  
One detail line.

The header line contains the description of the fields displayed by the detail lines.

The detail line displays the Customer for which the profile will be updated. This line contains the following information:

Customer Number,  
Customer Name.

The Customer Profile List is made up of:

A header line,  
One detail line per indicator.

The header line contains the description of the fields displayed by the detail lines.

Each detail line contains the following information:

Indicator description.

The following describes the usage of each indicator.

Enter/View Dispute indicator determines the eBill Customer User's ability to enter and view disputes. If this indicator is OFF, the dispute check box will not appear in the invoice for approval and invoices for authorization view. As well, the eBill Customer User will not be able to select the view investigation option. The dispute amount will not be shown in the Account Summary view.

The View Credit Under Investigation determines the eBill Customer User's ability to view credited invoices. If this indicator is OFF, the eBill Customer User will not see the credits under investigation in the account summary view.

The 'Two Levels of Approval' indicator determines if the eBill Customer is using either the one step Authorize level or the two step Approve and Authorize level to manage invoices. If this **indicator is ON**, an eBill Customer uses both Approved and Authorized levels to manage invoices. In this case an eBill Customer User will have one of Read-Only, Initial Approval, Payment Authorization, Both Invoice Approval and Payment Authorization or No Access. If this **indicator is OFF**, the eBill Customer is using only the Authorized level to manage invoices. So all the references to approved or unapproved invoices will not be shown on any views of the system. In this case an eBill Customer User can have only one of Read-Only, Payment Authorization or No Access.

The Pay Using Other Method indicator determines whether an eBill Customer can use payment methods other than electronic payments. If this indicator is OFF, the cheque, direct deposit and wire transfer will not appear as payment options on the view.

The Pay via eBill indicator determines whether an eBill Customer can use electronic payments. If this indicator is OFF, the Canadian and or US Currency Bank Account will not appear as payment options on the view.

Request for Bill of Lading indicator determines if the eBill Customer User has access to the Bill of Lading e-mail request. If this indicator is OFF, the Unique Shipment ID hyperlink in all the views will be disabled.

E-mail for New Invoice indicator determines if an e-mail must be sent to the eBill Customer User when new invoices are populated from RMS to eBill.

E-mail for Past Due Invoices indicator determines if an e-mail must be sent to the responsible Account Receivable Representative when an eBill Customer User schedules a payment after the due date of any invoice in the payment.

E-mail for Dispute indicator determines if an e-mail must be sent to the responsible Rate Rep when an eBill Customer User enters a dispute.

Status.

By pressing the Status check box on a given detail line, the indicator on that line is set to ON.

Push Buttons.

The **Submit Changes** push button is used to apply the changes made by the eBill Administrator.

The **Cancel** push button is used to cancel the changes made by the eBill Administrator.

### 3.5 Consequences

By pressing the **Status** check box beside an Indicator description on a given detail line, the eBill Administrator gives the corresponding capability to an eBill Customer.

By pressing the **Submit Changes** push button, the eBill Administrator confirms the update of the Customer's profile. The Account Receivable Rep / Account Manager Access Point main menu will be displayed.

By pressing the **Cancel** push button, the eBill Administrator cancels the update of the Customer's Profile. The Account Receivable Rep / Account Manager Access Point main menu will be displayed.

### 3.6 Business Rules

This is the default of the following indicators:

Enter/View Dispute - on  
View Credit Under Investigation - on  
Two Levels of Approval - on  
Pay Via eBill - on  
Pay Using Other Method - off  
Request for Bill of Lading - on  
Email for New Invoice - on  
Email for Past Due - off  
Email for Dispute - on


### 3.7 Design Notes

The default values are stored in the eBill Customer Profile table itself with a key of 'DEFAULT'.  
The update of the Default values will be done with a database access tool such as Platinum.

### 3.8 eBill Customer Profile View

A description of the view is at the hyperlink: [eBill Customer Profile](#)

**EXHIBIT B**



Stuart Harvey McCabe,  
a Commissioner, etc.,  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009

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# **eBill - Freight Payments**

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## UC450 - Approve Invoices for Payment Use Case

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Document version 1.0

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# 1 INTRODUCTION

## 1.1 Purpose

This Functional Specifications document describes the **Use Case 450 Approved Invoices for Payment**, which is part of the **Business Function 400 Payments Summary and Details**.

The objective of the Payment Summary and Details Business Function is to allow the eBill Customer Users to approve, dispute and authorize payments of invoices. eBill Customer Users may access only the accounts associated to patron numbers for which they are granted the privilege from the eBill Administrator. CN Internal Users may view approved and disputed invoices as well as view authorized payments and details. CN Internal Users must first select a customer number before viewing any account information.

## 1.2 Definitions

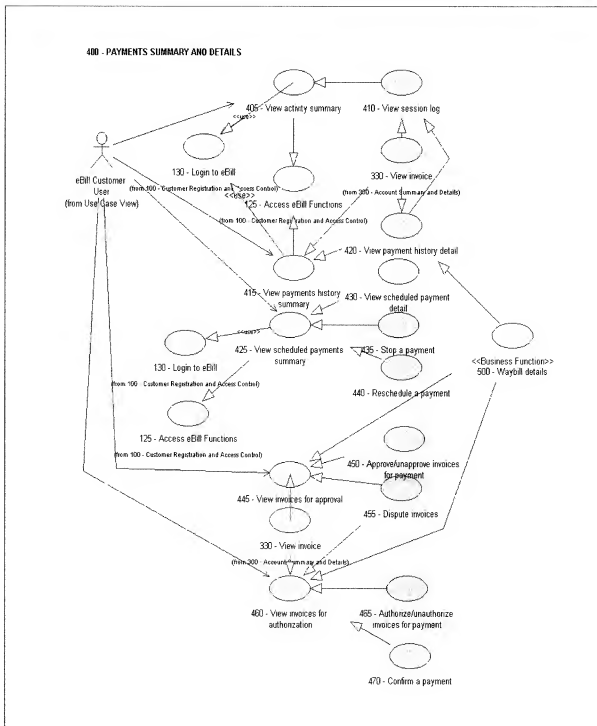
### 1.2.1 Use Case Definition

Refer to eBill – Use Case Definitions document for a definition of the terminology used by the Use Case concept.

### 1.2.2 Actors Definition

Refer to eBill – Actors Definitions document for a definition of eBill – Freight Payments Actors.

## 2 USE CASE DIAGRAM



## 3 USE CASE 450

### APPROVE INVOICES FOR PAYMENT

#### 3.1 Characteristics

Access Mode	On line
Service	
PERIOD	At all time
AVAILABILITY	90%
RESPONSE TIME	2 seconds or less
DATA REFRESH RATE	Immediate
USER INTERFACE	Web Interface

#### 3.2 Actors

eBill Customer Users.

#### 3.3 Assumptions

An eBill Customer User has been authorized to access the site and asked to view the Open Invoices for Approval view.

#### 3.4 Description

eBill Customer User wants to approve either selected or all the open invoices for a selected patron number or for all the patron numbers for which he/she has been granted access.

The Open Invoices for Approval view displays:

- The View Invoices combo box,
- The Go push button,
- The Select All for Approval push button,
- The Unselect All push button,
- The Submit push button,
- The Colour codes header lines
- The Field's description header line,
- One detail line per invoice number,
- A total line.

The View Invoices combo box is used to select:

- All the patron numbers for which the open invoices for approval will be displayed,
- A specific patron number for which the open invoices for approval will be displayed.

The Go push button:

The Go push button when clicked starts the display of the open invoices for approval view. The preferred patron number selection must be made. The initial presentation of the view will be blank. Selections must be done and the Go push button clicked before the results appear on the view.

The Select All for Approval push button.

The Select All for Approval push button is used to select all the invoices for approval on the view. The Approve radio button will be selected for all the invoices.

The Unselect All push button.

The Unselect All push button is used to unselect all the invoices. The Unselect radio button will be selected in the Select field of the detail line.

The Submit push button.

The Submit push button is used to process the selected invoices.

The colour codes header line contains the description of the colour codes used to display the invoices.

The field's description header line contains the description of the fields displayed by the details and the total lines.

On the initial appearance of the view, the detail lines are displayed in this order:

- Patron Number
- Status
- Invoice Date (descending). All radio buttons are defaulted to unselect.

If the invoice displayed on the detail line is Past Due (> 7 days), then the status and invoice date/due date will be displayed in red.

If the invoice displayed on the detail line is Due (<= 7 days), then the line will be displayed in black.

If up and down arrows are included in the field description, it is possible to sort the detail rows by the field value. Up arrow causes sort in ascending order of selected field. Down arrow causes sort in descending order of selected field.

The detail line displays the following information:

- Patron Number.
- Status (Always open).
- Approve, Dispute and Unselect radio button.
- Invoice Number / View History hyperlink.
- Invoice Date / Due Date.
- Billed Amount.
- Paid to Date.
- Open Amount.
- Unique Shipment ID.
- Waybill Number / Waybill Date
- Equipment ID.
- Rate Authority.
- Origin / Destination.

The **Total** line displays the following information:

**Total Billed Amount**

The sum billed amount for all detail rows invoiced in Canadian currency.

The sum billed amount for all detail rows invoiced in American currency.

**Total Paid to Date Amount**

The sum of paid to date amount for all detail rows invoiced in Canadian currency.

The sum of paid to date amount for all detail rows invoiced in American currency.

**Total Open Amount**

The sum of open amount for all detail rows invoiced in Canadian currency.

The sum of open amount for all detail rows invoiced in American currency.

### 3.5 Consequences

By selecting a specific Patron Number in the View Invoices combo box, the user limits the number of invoices for approval to that patron number selection.

By pressing Go, the user starts the Open Invoice for Approval.

By pressing the Select All for Approval push button, the user selects all the invoices for approval. The Approve radio button will be selected for all the invoices.

By pressing the Unselect All push button, the user unselects all the selected invoices for approval. The Unselect radio button will be selected for all the invoices.

By pressing the Submit push button, the user starts the next stage of the invoices for approval process. A pop-up window will ask the user to confirm the action.

If the user confirms the action.

If the Approve radio push button has been selected for an invoice, the Invoice Approved Amount will be updated.

If the Dispute radio button has been selected for one or more invoices, the Dispute Dialogue view will be displayed. (**UC455 Dispute Invoices**).

If the user cancels the process.

The Open Invoices for Approval view will be display as it was before the Submit push button was pressed.

By pressing the up arrow in a field description, a sort ascending is applied on the column.

By pressing the down arrow in a field description, a sort descending is applied on the column.

By pressing the Approve radio button, on a given detail line, the user approves the invoice.

By pressing the Dispute radio button, on a given detail line, the user disputes the invoice.

By pressing the Unselect radio button, on a given detail line, the user unselects the previous selection.

By pressing the Invoice Number hyperlink in the Invoice Number / Due Date field, on a given detail line, the user will view the detail of the invoice (**UC330 View invoice**).

By pressing the View History hyperlink, on a given detail line, the user will view the history of the invoice (**UC335 View invoice history**).

By pressing the Unique Shipment Id hyperlink number in the Unique Shipment Id field, on a given detail line, the user will access the bill of lading request view (**UC505 Request for a bill of lading**).

By pressing the Equipment ID number hyperlink in the Equipment Id field, on a given detail line; the user will view the equipment details (**UC510 View equipment**).

### 3.6 Business Rules

Refer to the following Use Cases for the description of the Business Rules:

UC115 - Manage eBill customer profile,  
UC120 - Assign access account for eBill users.


### 3.7 Design Notes

N/A.

### 3.8 Open Invoices for Approval View

A description of the view is at the hyperlink: [Open Invoices for Approval](#)

**EXHIBIT C**



Stuart Harvey McCabe,  
a Commissioner, etc.,  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009

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# **eBill - Freight Payments**

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## UC465 - Authorize/Unauthorize Invoices for Payments Use Case

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Document version 1.0



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# 1 INTRODUCTION

## 1.1 Purpose

This Functional Specifications document describes the **Use Case 465 Authorize/Unauthorize Invoices for Payment**, which is part of the **Business Function 400 Payments Summary and Details**.

The objective of the Payment Summary and Details Business Function is to allow the eBill Customer Users to approve, dispute and authorize payments of invoices. eBill Customer Users may access only the accounts associated to patron numbers for which they are granted the privilege from the eBill Administrator. CN Internal Users may view approved and disputed invoices as well as view authorized payments and details. CN internal Users must first select a customer number before viewing any account information.

## 1.2 Definitions

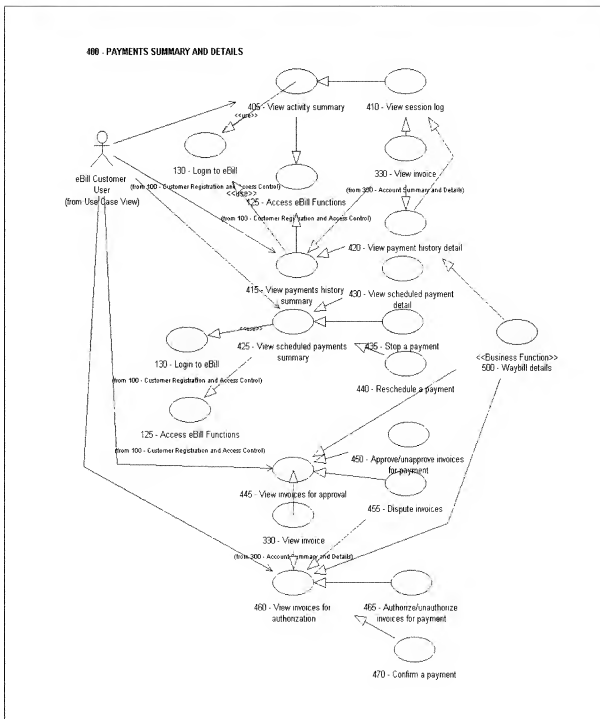
### 1.2.1 Use Case Definition

Refer to eBill – Use Case Definitions document for a definition of the terminology used by the Use Case concept.

### 1.2.2 Actors Definition

Refer to eBill – Actors Definitions document for a definition of eBill – Freight Payments Actors.

## 2 USE CASE DIAGRAM



### 3 USE CASE 465

## AUTHORIZE/UNAUTHORIZE INVOICES FOR PAYMENT

#### 3.1 Characteristics

Access Mode	On line
Service	
PERIOD	At all time
AVAILABILITY	90%
RESPONSE TIME	2 seconds or less
DATA REFRESH RATE	Immediate
USER INTERFACE	Web Interface

#### 3.2 Actors

eBill Customer Users.

#### 3.3 Assumptions

eBill Customer User has been granted access the site and has requested the Open Invoices for Payment view. The currency of the payment is selected from the eBill Payment view.

#### 3.4 Description

The eBill Customer User wishes to authorize a payment for approved Invoices. The eBill Customer User may choose to select either from all patron numbers for which he/she is granted access or simply from one of the patron numbers. The eBill Customer User may choose either 'all' or 'selected' invoices for payment.

If the eBill Customer is not using the approval of invoices, (Two Levels of Approval) indicator set to off, the open invoices will be displayed on the view.

The Open Invoices for Payment view displays:

- The View Invoices combo box,
- The Go push button,
- The Select All for Authorization push button,
- The Unselect All push button,
- The Submit push button
- The Colour codes header lines,
- The Field's description header line,
- One detail line per invoice number,
- A total line.

The View Invoices combo box is used to select:  
A display of invoices for 'All' patron numbers.  
A display of invoices for a specific patron number.

The Go push button:

The Go push button when clicked starts the display of the open invoices for payment view. The preferred patron number selection must be made. The initial presentation of the view will be blank. Selections must be done and the Go push button clicked before the results appear on the view.

The Select All for Authorization push button.

The Select All for Authorization push button is used to select all the invoices for authorization on the view. The Authorize radio button will be selected for all the invoices.

The Unselect All push button.

The Unselect All push button is used to unselect all the invoices. The Unselect radio button will be selected for all the invoices.

The Submit push button.

The Submit push button is used to process the selected invoices.

The colour code header line contains the description of the colour codes used to highlight invoices past due. The Status, the Invoice Date and the Invoice Due Date will be displayed in red for 'past due' invoices.

The field's description header line contains the description of the fields displayed by each detail row and the fields of the Total line.

On the initial appearance of the view, the detail lines are displayed in this order: Invoice Due Date, Status and the Patron Number. All the fields are sorted ascending. All radio buttons are defaulted to unselect.

If the invoice displayed on the detail row is Past Due (> 7 days), then the status and invoice date/due date will be displayed in red.

If the invoice displayed on the detail line is Due (<= 7 days), then the line will be displayed in black.

If up and down arrows are included in the field description, it is possible to sort the detail rows by the field value. Up arrow causes sort in ascending order of selected field. Down arrow causes sort in descending order of selected field.

The detail line displays the following information:

- Patron Number.
- Status (Always Open) or (Always Approved or Approved credit).
- Authorize, Dispute, Unapprove and Unselect radio button.
- Invoice Number hyperlink / View History hyperlink.
- Invoice Date / Due Date.
- Billed Amount.
- Paid to Date Amount
- Open Amount.
- Unique Shipment ID.
- Waybill Number / Waybill Date
- Equipment ID.
- Rate Authority.
- Origin / Destination.

The **Total** line displays the following information:

**Total Billed Amount**

- The sum of billed amount for all detail rows invoiced in Canadian currency.
- The sum of billed amount for all detail rows invoiced in American currency.

**Total Paid to Date Amount**

The sum of paid amount for all detail rows invoiced in Canadian currency.  
The sum of paid amount for all detail rows invoiced in American currency.

**Total Open Amount**

The sum of open amount for all detail rows invoiced in Canadian currency.  
The sum of open amount for all detail rows invoiced in American currency.

### 3.5 Consequences

By selecting a specific Patron Number in the View Invoices combo box, the user limits the number of invoices for authorization to that patron number selection.

By clicking the Go push button, the user starts Open Invoices for Payment view.

By clicking the Select All for Authorization push button, the user selects all the invoices for authorization. The Authorize radio button will be selected for all the invoices.

By clicking the Unselect All push button, the user unselects all the selected invoices for authorization. The Unselect radio button will be selected for all the invoices.

By clicking the Submit push button, the user starts the next stage of the invoices for authorization process. A pop-up window will ask the user to confirm the action.

If the user confirms the action

If the Authorize radio push button has been selected for an invoice, the Authorized Amount will be updated. Then the Payment Options view will be displayed (**UC470 Confirm a payment**).

If the Dispute radio button has been selected for one or more invoice, the Dispute Dialogue view will be displayed (**UC455 Dispute invoices**).

If the Unapprove radio button has been selected for an invoice, the Authorize Amount will be subtracted from the Approved Amount and the Activity Log will be updated.

If the user cancels the process.

The Open Invoices for Payment view will be displayed as it was before the Submit push button was clicked.

By clicking the up arrow in a field description, a sort ascending is applied on the column.

By clicking the down arrow in a field description, a sort descending is applied on the column.

By clicking the Authorize radio button, on a given detail line, the user authorizes the invoice.

By clicking the Dispute radio button, on a given detail line, the user disputes the invoice.

By clicking the Unapprove radio button, on a given detail line, the user unapproves the invoice.

By clicking the Unselect radio button, on a given detail line, the user unselects the previous selection.

By clicking the Invoice Number hyperlink in the Invoice Number / Due Date field, on a given detail line, the user will view the detail of the invoice (**UC330 View invoice**).

By clicking the View History hyperlink, on a given detail line, the user will view the history of the invoice (**UC335 View invoice history**).

By clicking the Unique Shipment ID hyperlink in the Unique Shipment Id field, on a give detail line, the user will access the Bill of Lading request view (**UC505 Request for a bill of lading**).

By clicking the Equipment ID number hyperlink in the Equipment Id field, on a given detail line; the user will view the equipment details (**UC510 View equipment**).

### 3.6 Business Rules

Refer to the following Use Cases for the description if the Business Rules:  
UC115 – Manage eBill customer profile.  
UC120 – Assign access account for eBill users.

### 3.7 Design Notes

N/A.

### 3.8 Open Invoices for Payment View

A description of the view is at the hyperlink [Open Invoices for Payment](#)

**EXHIBIT D**

A handwritten signature in black ink, appearing to read 'S. McCabe', is positioned above the printed name and title.

Stuart Harvey McCabe,  
a Commissioner, etc.,  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009



10103-167

December 22, 2000

BY COURIER

Ms. Brigitte K. Catellier  
Senior Corporate Counsel and  
Associate Secretary  
CANADIAN NATIONAL  
935 de la Gauchetière Street West  
MONTREAL QC H3B 2M9

Re: 1) CN's e-business initiative (eBill)  
2) [REDACTED]

Dear Ms. Catellier,

Further to our meeting of Dec 5, 2000, please find following our report regarding the Canadian National eBill system. The mandate given to us, as we understand it, was to consider the eBill system and to provide you with recommendations on aspects of the system on which patent protection could be pursued.

[REDACTED]

[REDACTED]

[REDACTED]

This report has been divided into the following 4 sections:

1. The eBill System
2. [REDACTED]
3. Conclusions and Recommendations
4. [REDACTED]

## **1. The eBill system**

The eBill system is an electronic payment system that allows customers to view the state of their accounts payable with a specific merchant (in this case Canadian National) over a computer network such as the Internet. In order to view debit notes and other account information, the customer logs on to a secure website using a login name and a password. The account information is displayed on a graphical user interface on the customer's computer terminal. Once the customer has viewed a certain debit note there is the choice of approving the debit note for payment, authorizing the payment to take place or alternatively indicating a refusal to pay by submitting an on-line dispute notification. The use of the above system allows a customer to obtain account information without interacting with a person at the merchant's location.

In a specific example of implementation, the electronic payment system provides a multi-stage electronic payment process. In particular, the multi-stage payment process includes two stages, namely an approval stage wherein a debit note is approved for payment by a person allowed to do so, followed by an authorization stage wherein the actual payment is made by under the authority of a second person. The authorization stage may include providing the merchant with a credit card number, with an authorization to debit a bank account or simply an indication that the cheque will be mailed on a certain day. The multi-stage payment process allows different individuals to be given different responsibilities, such that a first individual could be given authorization to approve a debit note and a second individual, distinct from the first individual, could be allowed to authorize payment for the debit note. There is the option to implement different levels of authorization where one person is authorized to approve debit notes of up to a first amount limit, and a second person authorized to approve debit notes of up a second, higher amount limit, etc.



\_\_\_\_\_ Canadian \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ to  
\_\_\_\_\_ observed this \_\_\_\_\_  
\_\_\_\_\_ these sources are \_\_\_\_\_, however,  
\_\_\_\_\_ that all \_\_\_\_\_ is  
\_\_\_\_\_ at this stage.

\_\_\_\_\_ can be found in  
\_\_\_\_\_ and the results of \_\_\_\_\_ can be found in  
\_\_\_\_\_ brief \_\_\_\_\_  
\_\_\_\_\_ of each patent.

our preliminary analysis \_\_\_\_\_  
\_\_\_\_\_.

\_\_\_\_\_   
\_\_\_\_\_   
over patent \_\_\_\_\_   
\_\_\_\_\_   
\_\_\_\_\_

\_\_\_\_\_ of  
particular relevance to the present subject. 2. Full \_\_\_\_\_ of  
these two patents is provided in appendix 5.

\_\_\_\_\_ (issued May 30,  
1960) \_\_\_\_\_ Corporation)

\_\_\_\_\_ describes \_\_\_\_\_  
system in which a biller automatically generates a bill to  
\_\_\_\_\_ at the \_\_\_\_\_  
\_\_\_\_\_ a notification for the  
\_\_\_\_\_ receives  
the bill in the form of \_\_\_\_\_  
the bill, the consumer is able to \_\_\_\_\_ to be  
paid \_\_\_\_\_ payment \_\_\_\_\_ by  
\_\_\_\_\_.

The system described in \_\_\_\_\_ of \_\_\_\_\_  
\_\_\_\_\_ the \_\_\_\_\_  
\_\_\_\_\_ may \_\_\_\_\_  
\_\_\_\_\_ \_\_\_\_\_  
\_\_\_\_\_ \_\_\_\_\_



[REDACTED]

3. Different Payment Authorization Levels

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] have any loaded patients on [REDACTED]  
[REDACTED] working at the [REDACTED]  
[REDACTED] that any patient filed over the past 10 months  
[REDACTED]  
[REDACTED] of the Empire and [REDACTED]


We take this opportunity to enclose our debit note for professional services rendered in this case.

FETHERSTONHAUGH &amp; CO.

Brigide Mattar

cc.: Mr. Olivier Chouc, Counsel for Canadian National

**EXHIBIT E**



Stuart Harvey McCabe,  
a Commissioner, etc.,  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009



MEMORANDUM TO FILE

A/TO : File 10103-167

DE/FROM : BM

DATE : March 5, 2001

OBJET/RE : Meeting with Brigitte Catellier at CN  
regarding the the e-Bill system  
on March 2<sup>nd</sup>, 2001

On this day, a meeting took place between Brigitte Catellier and Jennifer Marvin of CN and Brigide Mattar and Stephan Georgiev of Smart & Biggar in order to discuss patent strategy for the e-Bill system. More specifically, the report dated December 22<sup>nd</sup>, 2000 pertaining to the patentability analysis of the e-Bill system was addressed.

PART 1

## CONSULTATION REGARDING e-BILL SYSTEM

## Background

██████████, who traditionally, aggresses in the ██████████  
 the research division ██████████ ██████████ this patent  
 ██████████ ON ██████████ ██████████ ██████████ Regarding the e-  
 Bill system, on the basis of the report, it is understood that  
 there are two facets of the system that may be of interest. The  
 first one being a multi-stage electronic payment process and the  
 second being the use of different payment authorization levels.  
 The question arises as to whether it is worthwhile protecting these  
 features. In other words, are these features of importance?

It is to be understood that e-Bill is part of CN's e-commerce initiative. Consequently, the [redacted] who [redacted] would be a major stakeholder. Jennifer Marvin provided the following input:

the authorization process allows two different individuals in two different countries to authorize payment for a bill. The use of this shaves off two or three days off the payment process which

results in significant savings considering the size of the amounts involved. In effect, several millions of dollars are saved in transactions by shaving off two or three days from the payment.

Regarding the several levels of authorization, savings are achieved by a reduction in internal processing at CN which may also save significant amounts of money. On the basis of this information, it has been decided to proceed with the preparation of two patent applications on the above-noted subject matter.

I am to communicate with Jennifer Marvin directly at (416) 217-6085 and at fax number (416) 217-6190.

Her e-mail is: Jennifer.Marvin@CN.ca

Jennifer will be on vacation next week but will be back the week of March 12.

#### Action item

Prepare two patent applications for filing in Canada and in the United States.

Open two U.S. files, two Canadian files and place on docket the date of May 1<sup>st</sup>, 2001 for the filing of all cases.

[REDACTED]

#### Action items

[REDACTED]

## Action items

Follow up on information regarding the

## PART 2

~~GENERAL ATTENTIVE COMMUNICATIONS DIRECTION TO THE DIRECTOR~~

[illegible]

- a) [REDACTED]
- b) [REDACTED]

[REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]

1. Maintenance [REDACTED]  
[REDACTED] maintenance [REDACTED] and railway  
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

2.

3.

Action item

1.

2.

3.

Action item

1.

2.

[REDACTED] S  
[REDACTED] S  
[REDACTED] S  
[REDACTED] S  
[REDACTED] S

[REDACTED]

2 [REDACTED]

BM/1m

C.C.: EMS

**EXHIBIT F**

A handwritten signature in black ink, appearing to read 'S. McCabe', is positioned above the printed name and title.

Stuart Harvey McCabe,  
a Commissioner, etc.,  
Province of Ontario,  
for Smart & Biggar, Barristers and Solicitors  
and Fetherstonhaugh & Co.,  
Patent and Trade Mark Agents.  
Expires September 19, 2009

Brigide Mattar  
bmattar@smart-biggar.ca

**Montreal file no. 10103-169/170**

April 23, 2001

Mrs. Jennifer Marvin  
CANADIAN NATIONAL RAILWAY COMPANY  
277 Front Street West  
5<sup>th</sup> floor  
Toronto, Ontario  
M5V 2X9

**BY COURIER**

RE: Proposed Patent Application in Canada and in United States  
Applicant: CANADIAN NATIONAL RAILWAY COMPANY  
Title: **METHOD AND SYSTEM FOR PROCESSING INVOICES**  
Your ref. : \_\_\_\_\_

Dear Jennifer,

We have completed the preparation of a patent application on the above noted subject matter. Assuming that you find the application to your satisfaction, we will file it in the Canadian Patent Office and in the United States Patent and Trademark Office. Please find attached the following documents:

1. a final draft of the application, including formal drawings;
2. a Declaration and Power of Attorney to be executed by the inventors at the indicated areas;
3. two Assignments to be executed by the inventors and a witness at the indicated areas;

Please ask the inventors to check the Declaration and the Assignments to ensure that the information contained therein is correct. If any information is incorrect, such as the address or the spelling of the inventor's name, please ask them to mark the changes on all documents and initialize the changes.

Would you kindly return the signed documents, **BY FAX**, immediately with the originals by mail as soon as possible thereafter. If the inventors make changes to the application or the drawings, please do not sign the above documents and contact the undersigned immediately.

Please note that under current rules, the applicant or any party having an interest in the invention or involved in the preparation or the prosecution of the application has a duty to promptly disclose to the U.S. Patent Office the prior art known to him which can be material to the patentability of the subject matter on which protection is sought. Failure to comply with this requirement may result in the eventual patent being held invalid and unenforceable. We will be submitting the following documents along with the filing of the application:

U.S. patent	6,128,603
U.S. patent	6,070,150
U.S. patent	6,044,362
Canadian patent	2,307,497
Canadian patent	2,302,577

We thank you for your cooperation and we remain,

Yours very truly,

FETHERSTONHAUGH



Brigide Mattar

BM//jqb  
Encls.

c.c. Brigitte Catellier  
Oliver Chouc